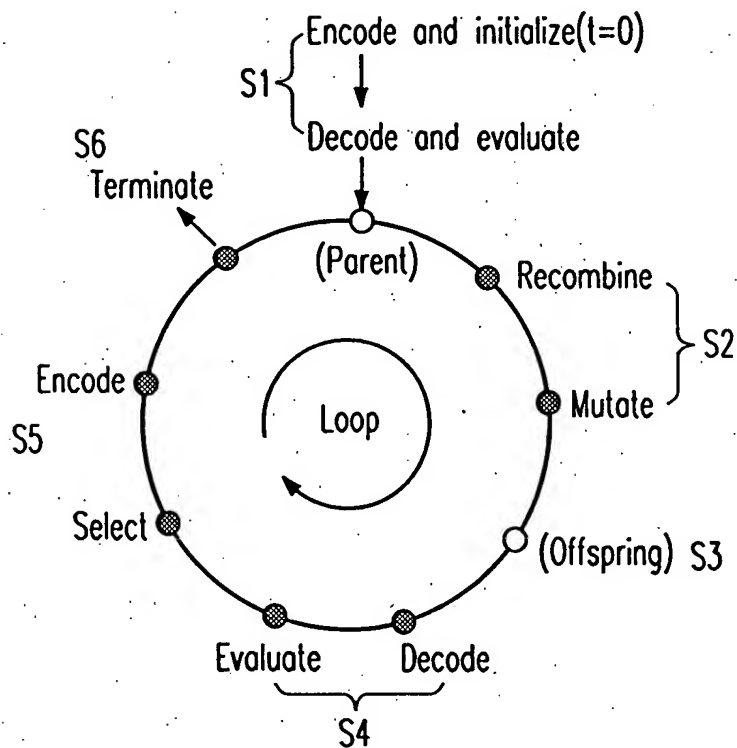*IN THE FIGURES*

Please change figures 1 and 3 as indicated in red on the attached Proposed Drawing Changes on the replacement sheets, where Figure 1 is now labeled as "Prior Art." Figure 3, now include labels identifying the path when the query in steps S8 and S12 is "Yes" and "No" as requested by the Examiner. Each of the attached drawing sheets are identified as a "Replacement Sheet" in accordance with 37 CFR 1.121.

3

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Algorithm

t:=0;
encode and initialize P(0)
decode and evaluate P(0)
do
  recombine P(t)
  mutate P(t)
  decode P(t)
  evaluate P(t)
  P(t+1) = select (P(t)
  encode P(t+1)
  t:=t+1
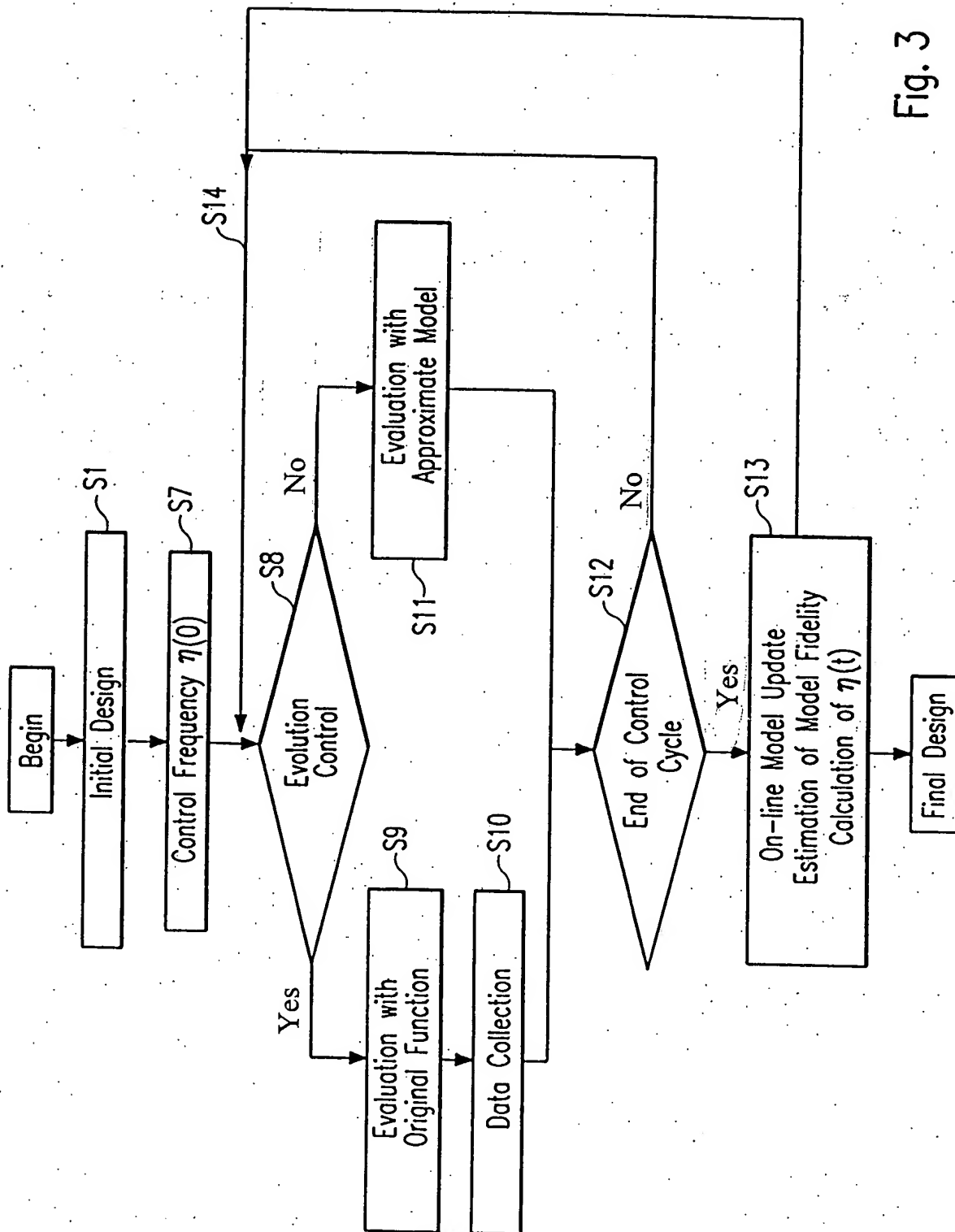until terminate

Fig. 1

Prior Art

Begin

Initial Design — S1

Control Frequency $\eta(0)$ — S7

Evolution Control — S8

Yes

No

Evaluation with Original Function — S9

Data Collection — S10

Evaluation with Approximate Model — S11

End of Control Cycle — S12

No

Yes

On-line Model Update Estimation of Model Fidelity Calculation of $\eta(t)$ — S13

Final Design

S14

Fig. 3